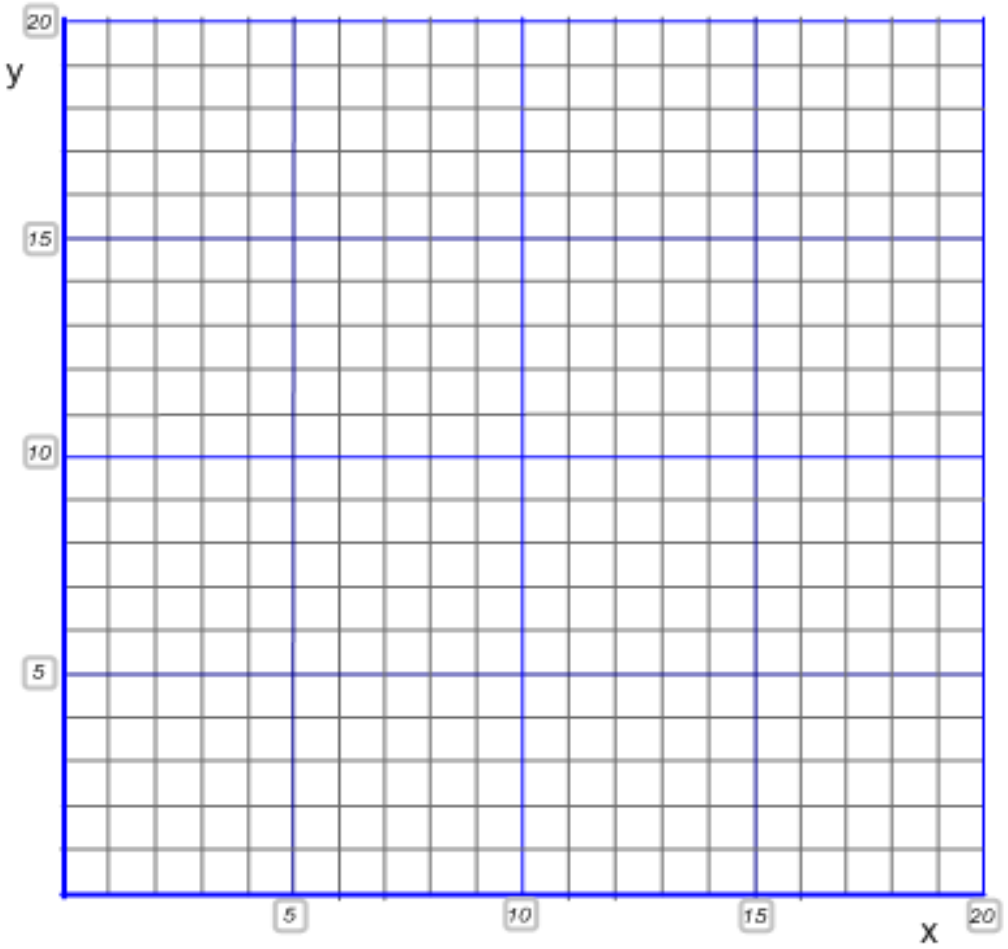
Business Application for Inequalities

Name:_____Period:_____Date:_____

A local cafe makes the profits given in the table. The cafe owner sells primarily coffee and donuts. The owner wants to earn at least $2,000 a month. Show and describe all the possible combinations of coffee and dounuts that the cafe needs to sell to meet his goals.

Profit per Item Sold ($)	
Coffee	$1.00
Dounuts	$0.25



1. $x + 0.25y \geq 2000$

Define the variables

The variable **x** represents the number of _____ sold.

The variable **y** represent0s the number of _____ sold.

The $2,000 represents _____.

Note: The range must be scaled to accommondate _____ dounuts sold, while the domain must be scaled to accommondate _____ coffees sold. These values are _____the number of units.

2. Graph the Inequality and label important information.

3. Explain the meaning of all values on the line.	4. Explain the meaning of all values above the lines.

5. Fill in the table with combinations that will help the owner achieve it goal.

Coffee					
Dounuts					

Business Type:_____

Profit per Item Sold ($)	

1. _____ $x+$ _____ $y\geq$ _____

Define the variables

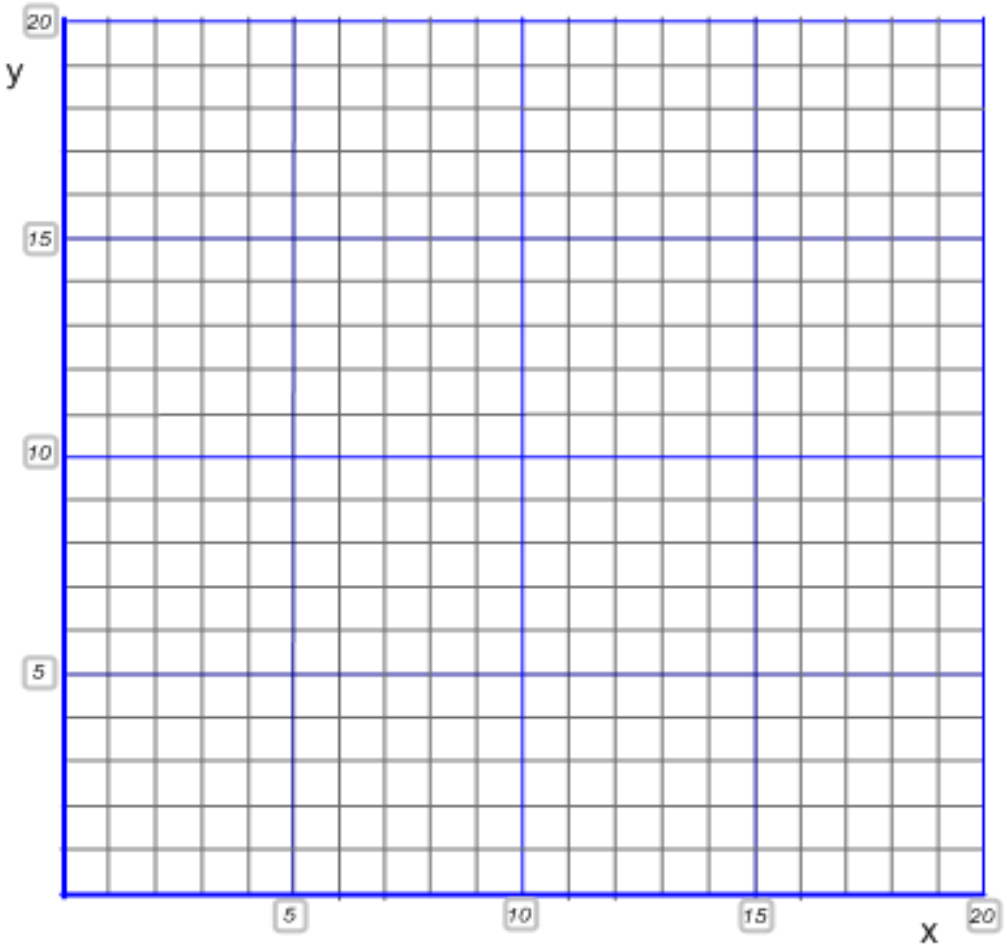
The variable **x** represents the number of _____ sold.

The variable **y** represent0s the number of _____ sold.

The $_____ represents _____.

Domain: _____ Range:_____

2. Graph the Inequality and label important information.



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